Recovery Plan Action Status

Plan Name: Seven Coastal Plants and the Myrtle's Silverspot Butterfly Recovery Plan

Plan Status: Final Plan Date: 29-Sep-98 Lead Agency: USFWS

Lead Office: Ventura Fish And Wildlife Office 644-1766)

Species	Action Priority #	Action #	Action Description	Action Status	Est. Initiation Date	Est. Completion Date	Responsible Parties	Work Type	Labor Type	Action Comments
Beach layia (Layia carnosa)	1	1.41	Inform land owners - Layia carnosa	Ongoing Current	FY 1995 - FY 1999		Local Lead Agencies [California coast, Myrtle's Silverspot/Seven coastal plants habitat]	Other: Regulations	Labor type not yet selected	Protect habitat: Monterey and Humbolt Counties; Coastal Commission and/or County LCP staff conduct routine notification of private landowners during project development planning process
Beach layia (Layia carnosa)	1	1.42	Consult agencies - Layia carnosa	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service	Research: Habitat Status	Internal Field Assistance	Multiple agency coordination in monitoring and mgmt across Humboldt, Sonoma, Monterey and Santa Barbara Counties, involving BLM, USFWS, Pt Reyes NS, California State Parks, Vandenberg AFB and private NGO's.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Beach layia (Layia carnosa)		2.11	Minimize invasive plant threats on private land	Partially Complete			U.S. Bureau of Land Management	Work type not yet selected	Labor type not yet selected	Habitat restoration (exotics removal) has been ongoing by NGO's for many years at Humboldt Bay and Monterey Bay for Erysimum menziesii and/or Layia carnosa.

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										lupine was removed (which is known to facilitate invasion by non- native species by increasing nitrogen and organic content).
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)		3.1	Examine the interactions of cattle grazing on listed plant habitat	Not Started			To be determined	Work type not yet selected	Labor type not yet selected	

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										Genetic study by Brinegar and Baron (2009) indicates that C. pungens/C. robusta complex is genetically very similar, and that taxonomic revision to include all varieties of this complex as two varieties of C. pungens may be warranted in the future (Lena Chang 7/29/2010). Extensive research conducted on life history of Erysimum menziesii, Layia carnosa and Chorizanthe howelii over the past decade.
Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	2	3.4	Determine habitat requirements for plants	Ongoing Current	FY 1995 - FY 1999			Research: Habitat Requirements	Internal Field Assistance	
Beach layia (Layia carnosa)	2	4.51	Establish working group -Layia carnosa	Not Started			U.S. Fish and Wildlife Service	Acquisition	Labor type not yet selected	

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Beach layia (Layia carnosa)	2	4.52	Implement guidelines -Layia carnosa	Partially Complete			To be determined	Work type not yet selected		Habitat restoration efforts and species management efforts continuing at Freshwater Spit and Humboldt Bay by BLM, Humboldt Bay National Wildlife Refuge, National Parks, NGO's; also management activities in accordance with recovery at Monterey Bay (State Parks, NGO's) and Vandenberg AFB.

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Menzies' wallflower (Erysimum menziesii), Howell's spineflower (Chorizanthe howellii), Monterey spineflower (Chorizanthe pungens var. pungens), Myrtle's silverspot butterfly (Speyeria zerene myrtleae), Monterey gilia (Gilia tenuiflora ssp. arenaria), Clover lupine (Lupinus tidestromii), Sonoma spineflower (Chorizanthe valida), Beach layia (Layia carnosa)	3	5.3	Survey likely habitat	Ongoing Current	FY 1995 - FY 1999		U.S. Fish and Wildlife Service, To be determined	Work type not yet selected	Labor type not yet selected	Routine surveys conducted as required as part of project planning efforts at state and federal levels across the ranges of the species.

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